U.S. Department of the Interior • U.S. Geological Survey

MINERAL INDUSTRY SURVEYS

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TIN IN JANUARY 1997

Domestic consumption of primary tin in January 1997 was estimated by the U.S. Geological Survey (USGS) to be about 13% higher than in December 1996 and 10% lower than in January 1996.

The *Platt's Metals* Week composite price for tin was $3.96 per pound, slightly higher than in December 1996 and 5% lower than in January 1996.

It was reported that a major domestic tinplate producer, USS - Posco Industries (Pittsburgh, CA), was considering a $100 million upgrade of its tin mill. The operation is a joint venture of U.S. Steel Group and Pohang Iron and Steel Ltd. of Korea and is the only tin mill on the West Coast. If approved, the project could begin in 1998 and be completed by 1999. One major change reportedly would be to enable the 2,200-foot-per-minute tinplate and tin-free-steel line to produce tinplate products up to 48 inches wide. Only a few tin mills in the world have this capability; and the maximum present capability in the United States is 42 inches, with many products restricted to 37 inches. It has been reported that some tinplate buyers were planning to install large end- presses that would be compatible with tinplate coils from a wider USS-Posco tinplate line. USS-Posco's tinplate production was estimated to be 450,000 metric tons annually, more than one-half of the 750,000- to 800,000-ton annual West Coast tinplate market.[1]

In France, further progress was reported on the proposed merger of two large European can-makers: Pechiney (France) and Schmalback - Lubeca (Germany). A letter of intent was signed in November 1996 with Doughty Hanson and Company, a private equity fund, giving each can-maker a 20% share. Estimated sales would be $1.4 billion annually from 35 plants in Europe and Japan. The deal is subject to Government and stockholder approval. The merger would create the second largest metal container firm in Europe. Carnaud Metalbox would remain the largest, with estimated annual sales of $2.2 billion.[2]

In Brazil, it was reported that the country's only tinplate producer, Cia. Siderúrgica Nacional, planned to invest $70 million to construct a new tin can facility in the northeastern State of Ceará. It was expected that the plant would commence production in late 1997 and have a capacity of 700 million cans yearly. Brazil currently produces 4 billion cans yearly; production is expected to rise to 12 billion by the year 2000.[3]

Also in Brazil, it was reported that Paranapanema increased its refined tin production from 12,000 tons in 1995 to 15,000 tons in 1996. However, production still lagged from the levels of the early 1990's when output reached 27,000 tons annually. The dip in output after that earlier period was attributed to a lack of sufficient investment. A higher level of investment reportedly resumed in 1996 after the company's merger with a State pension fund. The company reportedly is expected to produce 17,000 tons in 1997 and 21,000 tons in 1998.[4]

In Australia, it was announced that Norminco had halted production at its Leichardt Creek Mine in northern Queensland, amid reports of financial difficulties. The mine has been operating at low levels recently, owing to falling ore grades. On January 16, 1997, Norminco's shares were suspended from trading on the Sydney Stock Exchange; and the firm entered into receivership. Reportedly, Norminco was now negotiating with Macquarie Bank, which set up the finance package to facilitate the firm's original $2 million investment program when the mine started in 1995.[5]

In Bolivia, it was reported that the Government-owned mining organization COMIBOL has encountered continued strike action by miners since early December 1996, as workers became restive about COMIBOL's prospective privatization. Problems began on December 2, 1996, when the 500 workers at the Colquiri and Huanuni tin mines went on strike over a productivity bonus.[6]

In China, it was observed that tin production in that country declined in 1996, due to disruptions in the middle part of the

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year caused by flooding. Tin production was estimated to be 56,000 tons. China is the world's largest tin producer.[7]

Update

On March 14, 1997, the *Platt's Metals Week* composite price for tin was $4.02 per pound.

[1]CRU Tin Monitor. Tinplate News. Feb. 1997.
[2]_____. Tinplate News. Feb. 1997.
[3]_____. Tinplate News. Feb. 1997.
[4]_____. Paranapanema To Boost Production. Feb. 1997.
[5]_____. Other Mine Developments. Feb. 1997.
[6]_____. COMIBOL Plagued By Strike Action. Feb. 1997.
[7]_____. China Production Remains Weak. Feb. 1997.

TABLE 1
SALIENT TIN STATISTICS 1/

(Metric tons, unless otherwise noted)

	1996 p/	December 1996	January 1997
Production, secondary e/ 2/	10,800	900	900
Consumption:			
Primary	36,200	2,890	3,280
Secondary	10,300	840 r/	827
Imports for consumption, metal	33,200	3,170	NA
Exports, metal	2,790	489	NA
Stocks at end of period	4,670	4,670 r/	4,710
Prices (average cents per pound): 3/			
Metals Week composite 4/	412.43	394.76	396.17
Metals Week New York dealer	288.10	272.06	274.22
London, standard grade, cash	279.00	265.00	266.00
Kuala Lumpur	275.19	263.82	264.09

e/ Estimated. p/ Preliminary. r/ Revised. NA Not available.

1/ Data are rounded to three significant digits, except prices.

2/ Comprises tin recovered from alloys and tinplate. The detinning of tinplate (coated steel) yields only a small part of the total.

3/ From Platt's Metals Week.

4/ The Metals Week composite price is a calculated formula, not a market price, that includes fixed charges, finance charges, and a risk factor. It normally is substantially higher than other tin prices.

TABLE 2
METALS WEEK COMPOSITE PRICE 1/

(Cents per pound)

Period	High	Low	Average
1996 (annual)	436.25	388.49	412.43
1996:			
January	423.56	415.24	418.59
February	417.70	411.89	415.55
March	427.03	405.03	414.71
April	435.05	422.96	429.61
May	436.25	415.30	426.88
June	418.01	410.83	413.65
July	423.04	408.27	417.03
August	411.84	407.75	409.11
September	413.10	402.69	408.04
October	404.38	396.12	400.25
November	409.57	392.40	401.00
December	405.37	388.49	394.76
1997:			
January	404.19	387.89	396.17

1/ The Metals Week composite price is a calculated formula, not a market price, that includes fixed charges, finance charges, and a risk factor. It normally is substantially higher than other tin prices.

Source: Platt's Metals Week.

TABLE 3
TINPLATE PRODUCTION AND SHIPMENTS IN THE UNITED STATES 1/

(Metric tons, unless otherwise noted)

Period	Tinplate waste (waste, strips, cobbles, etc.) (gross weight)	Tinplate (all forms) Gross weight	Tin content	Tin per metric ton of plate (kilograms)	Shipments 2/
1996 p/	181,000	1,550,000	9,620	6.2	2,750,000
1996:					
December	12,700	114,000	664	5.8	231,000
1997:					
January	16,200	140,000	876	6.3	NA

p/ Preliminary. NA Not available.
1/ Data are rounded to three significant digits.
2/ Shipments data from American Iron and Steel Institute monthly publication AIS10.

TABLE 4
U.S. TIN IMPORTS FOR CONSUMPTION AND EXPORTS 1/

(Metric tons)

Country or product	1995	1996 November	1996 December	1996 January-December
Imports:				
Metal (unwrought tin):				
Bolivia	6,630	353	515	6,290
Brazil	8,070	660	1,200	9,460
China	5,610	129	203	2,760
India	146	80	80	898
Indonesia	7,230	520	666	7,550
Malaysia	3,810	10	--	965
Russia	149	--	--	435
Other	1,510	249	506	1,810
Total	33,200	2,000	3,170	30,200
Other (gross weight):				
Alloys	11,400	711	1,360	11,800
Bars and rods	484	95	56	695
Foil, tubes, and pipes	16	(2/)	--	(2/)
Plates, sheets, and strip	468	6	4	641
Powders and flakes	37	--	--	--
Waste and scrap	15,900	29	258	6,740
Miscellaneous	1,470	183	129	1,360
Total	29,800	1,020	1,800	21,300
Exports (metal)	2,790	560	489	4,780

1/ Data are rounded to three significant digits; may not add to totals shown.
2/ Less than 1/2 unit.

Source: Bureau of the Census.

TABLE 5
CONSUMPTION OF TIN IN THE UNITED STATES, BY FINISHED PRODUCT 1/

(Metric tons of contained tin)

Product	1996 p/	1996 December Primary	1996 December Secondary	1996 December Total	1997 January Primary	1997 January Secondary	1997 January Total
Alloys (miscellaneous) 2/	96	28	W	28	36	W	36
Babbitt	245	23	W	23	20	W	20
Bar tin and anodes	78	8	--	8	W	--	W
Bronze and brass	1,860	41	103	144	45	99	144
Chemicals	1,270	496	--	496	529	--	529
Collapsible tubes and foil	25	25	W	25	21	W	21
Solder	8,720	501	W	501	635	W	635
Tinning	1,650	140 r/	--	140 r/	134	--	134
Tinplate 3/	9,620	664	W	664	876	W	876
Tin powder	291	W	--	W	49	--	49
White metal 4/	8	W	--	W	W	--	W
Other	5,870 r/	65	237 r/	302 r/	30	228	258
Total reported	29,700	1,990	340 r/	2,330	2,380	327	2,700
Estimated undistributed consumption 5/	16,800	900	500	1,400	900	500	1,400
Total	46,500	2,890	840 r/	3,730	3,280	827	4,100

p/ Preliminary. r/ Revised. W Withheld to avoid disclosing company proprietary data; included with "Other."

1/ Data are rounded to three significant digits; may not add to totals shown.

2/ Includes terne metal.

3/ Includes secondary pig tin and tin acquired in chemicals.

4/ Includes pewter, britannia metal, and jewelers' metal.

5/ Estimated consumption of plants reporting on an annual basis.

TABLE 6
DEFENSE LOGISTICS AGENCY
TIN STOCKPILE DISPOSALS 1/

(Metric tons)

Period	Monthly disposals 2/
1996:	
January	90
February	450
March	534
April	5
May	10
June	330
July	1,180
August	1,370
September	2,300
October	--
November	210
December	200
Year total	6,670
1997:	
January	215

1/ Data are rounded to three significant digits; may not add to totals shown.

2/ These disposals represent only the daily, spot sales program. They do not include the long-term dealer contract sales program.

Source: Defense Logistics Agency.